

XIII. *Some interesting Additions to the Natural History of Falco cyaneus and pygargus, together with Remarks on some other British Birds.* By George Montagu, Esq. F.L.S.

Read May 5, 1807.

FALCO CYANEUS.

Ind. Orn. i. p. 39. 94.

Hen Harrier. *Lath. Syn.*

THAT the natural history of a bird indigenous to this country, and by no means uncommon, should have so long continued in obscurity, must, to those not in the habit of investigating nature, appear very extraordinary; but the scrutinizing ornithologist will recollect how few opportunities occur of proving, or controverting, a generally received opinion by ocular demonstration. Upon the present subject the mind of the scientific world has been so extremely oscillatory for want of proof, that most authors have related the opinions of others, or reasoned from concurring circumstances, blended with parole evidence. In fact, it must be confessed, that although I had many reasons for believing the Hen Harrier, *Falco cyaneus*, and Ringtail, *Falco pygargus*, to be the same species, yet I could not adduce any well-authenticated proof that this was really the fact, when the *Ornithological Dictionary* was published. It is true that I was assured by a most worthy and scientific clergyman in Sussex, that the gamekeeper of General Prescott, in whose neighbourhood he

he resided, had actually shot both these birds from the same nest, and that they had both been preserved in one case, and were in the General's possession. That my friend gave implicit credit to the keeper's assertion I could not have the least doubt; but as I had been assured from another quarter, that not only the male and female Hen Harrier had been shot, which belonged to the same nest, but that the young which could just fly were also killed, and were of the same cinereous-gray colour as the parent birds; Who, perplexed with such opposite assertions; could determine? But, to close this discordancy, I shall transcribe a passage from the latest publication on ornithology exclusively, that has appeared in this country, except the Second Supplement to the General Synopsis. The author's words are these: "It has been supposed that this and the following (relating to the two birds in question) are male and female; but the repeated instances of Hen Harriers of both sexes having been seen, leave it beyond all doubt, that they constitute two distinct species."

Such a strong unqualified assertion appearing on public record, stamped with the authority of the author without reference to the nature of the proof, should seem to proceed from personal knowledge; and as the only positive proof to be obtained in such case is by dissection, it might naturally be presumed that the author had really determined this long desideratum by the knife.

That male Ringtails have frequently occurred has been well and repeatedly authenticated, but no well attested fact of a female Hen Harrier is, I believe, to be found. Those who have formed their own opinions upon this subject will not readily adopt that of another, without direct and incontrovertible proof; and since there are two opposite opinions founded equally upon

upon pointed assertions, it will not be allowed by one party that both the *F. cyaneus* and *F. pygargus* having been shot at the same nest, is a direct proof of their being the same species. Nor, on the contrary, will the other be convinced of the fact by a bare assertion that female Hen Harriers have been observed; for it may be said, that as birds of prey plunder the nests of others, one of these birds might be shot in that act of depredation. And the circumstance of a single instance of a female bird appearing in the habit of a Hen Harrier, may be disputed as equally liable to objection, since instances have not been wanting to prove that female birds have occasionally assumed the male plumage. Such difficulties could only be removed, and the fact indisputably established, by finding the nest, and rearing the young; and I am happy in being now enabled to lay before the Society the result of an experiment of this nature, which must bring all controversy to a conclusion. To a member of this Society, the Rev. Mr. Vaughan, we are greatly indebted, as the discovery might yet have been protracted to a series of years, but for his kind communication and essential aid towards the development of the subject.

About the latter end of June, in the year 1805, my friend informed me that his servant had found the nest of a Hen Harrier in some furze, which contained three young, and an addle egg; at this time the infant birds were very small, and only covered with white down: it was therefore determined to take them as soon as we deemed them sufficiently large to be brought up by hand: when that period arrived, the servant was directed to shoot one, and if possible both of the old birds, previously to his bearing away what was considered a prize of no small value.

On the return of the man with the young, he brought with him also the Hen Harrier, which he assured us he had under concealment

cealment in the furze, shot in the act of dropping a thrush into the nest, while the female (as he seemed to consider the other, and which he described to be a brown hawk) was covering the young. He afterwards shot at and wounded the female, but could not obtain it.

Strong as this person's evidence was in our own minds, yet it conveyed no more to the public mind than what had been so repeatedly asserted on similar authority: being, however, in possession of the aerie, the means were in our power of fully determining the point in question; and to enable me to observe and note the changes that might take place in the plumage, I undertook the care of the whole brood.

At this time the two largest had thrown out many feathers, sufficient to discover the plumage of the Ringtail approaching; the other, by its appearance, must have been hatched much later. In about a month it was evident from size, that there was but one male, so that all my hopes rested upon this single life. As they became full feathered, there was at first no distinction in plumage, but the eyes of the supposed male were always lighter than in the others, whose irides were so dark as not to be distinguished at a small distance from the pupil. In the dress of the Ringtail the whole continued through the winter, when the one which had been weakly from the first, died; this circumstance induced me to force a premature change in some of the quill and tail feathers of the others, fearing some accident might frustrate my earnest desire of bringing matters to a decisive proof; and about the middle of June I was highly gratified by discovering an appearance of the new feathers in the place of those which had been plucked out, and that clearly evinced the smallest bird to be a Hen Harrier, and the larger to be a Ringtail.

Thus I had compelled nature to declare her secrets before the

appointed time; for in every other respect their plumage was yet similar, excepting about the sides of the face, which were paler in colour in the former, in which also the irides were of a dull yellow, somewhat mottled, whereas in the latter they still continued dark.

The shyness of these hawks had occasioned their breaking most of their larger feathers, although confined in a place ten feet in length by five in width; and as their regular moulting season was advancing, they were turned into a garden surrounded by a wall, where, after some time, the female died of the cramp in her legs.

The male had about the 20th of July thrown out many of the new feathers naturally, especially the greater coverts of the wings, and a few gray feathers in different parts of the body. On the 20th of August, the greater part of the quill and tail feathers were grown to their full length, and a gradual increase of gray feathers appeared on most other parts: the eyes also became more orange, but it was not till the middle of October that it had attained that state which made it desirable to retain, as an existing fact of the change; it was then killed, and is now in my museum. In this state the plumage of the Ringtail or female still remains about the neck, the smaller coverts of the wings, the thighs, and part of the belly, intermixed with the male plumage: the top of the head and wreath have also a mixture of the feathers of both sexes: the quills, scapulars, and tail, are completely masculine; in the last of these there are a few small broken bars of cinereous-brown on a white ground, in the three outer feathers, the exterior margins cinereous-gray; the six middle feathers are almost wholly gray, and the markings are very obscure beneath.

Having by the most powerful evidence traced this bird from the egg to that state approaching maturity, which so clearly and

satisfactorily

satisfactorily proves that *Falco cyaneus* and *pygargus* are actually of the same species, two queries arise out of the observations of different authors. It has been remarked by Doctor Latham, that no author has mentioned the Hen Harrier as a bird of the American continent. Do the females only migrate to those particular parts where they have been observed, after the breeding season; or is not the transatlantic Ringtail a distinct species, not differing in sexual plumage? The other query is with respect to the sexual distinction of the Ash-coloured Falcon of the *Orn. Dict.* which has been considered to be most probably the Northern Falcon, or *Falco hyemalis*; for although the male of this species has only occurred to me, yet, nothing having been related by any author to induce a belief that the sexes are essentially different in plumage, may we not reasonably conjecture that the female *F. hyemalis* has been mistaken for a *F. cyaneus*, and possibly occasioned some of the accounts related, concerning the similitude in the plumage of both sexes of the latter? Indeed the *F. hyemalis* has generally been described to be considerably larger than those males which have come under my inspection, a circumstance serving to strengthen the opinion that the sexes are similar in plumage, (the females of this tribe being always the largest,) and may have been confounded with the *cyaneus*, as was the case of the two specimens which were sent to me.

From the account here given of the Hen Harrier, it is quite clear that the change of plumage is effected in the autumn after it leaves the nest; and as it is between three and four months in the act of moulting, it is certainly very extraordinary that so few instances have occurred of its being killed in that state which might have been decisive. That such has been taken is evident by the description of *Falco Hudsonius* of authors,

thors, which is doubtless this bird in change of plumage; and it will be observed, that mention is made in the *Ornithological Dictionary* of some slight indication of such a change; one had only a few gray feathers, beginning the change, and another had several brown feathers in the smaller coverts of the wings, which now appear to be the last that are changed.

I have now only to remark that the nest of this bird was composed of sticks rudely put together, was nearly flat, and placed on some fallen branches of furze that supported it just above the ground. The addle egg found in the nest is little inferior to that of the Moor-Buzzard, and similar in shape and colour, being spotless, but of a sullied white.

FALCO CINERAREUS.

Ash-coloured Falcon. *Orn. Dictionary.*

By the examination of a recent specimen of this bird killed on the 10th of August 1803, near Kingsbridge, in Devonshire, I am enabled to add somewhat to the description of it, and to correct a mistake in the work above referred to, which I trust will not be unacceptable to the ornithologist.

It weighed nine ounces and three quarters: length eighteen inches; breadth three feet eight inches and a half; length from the elbow to the end of the third quill feather, which is the longest, fifteen inches and a half; length of the tail from the gland on the rump nine inches and a half. Bill black, the base and cere greenish: irides and eyelids bright yellow: crown of the head, cheeks, throat, under part of the neck, and upper breast dark ash-colour: upper part of the neck, back, and scapulars cinereous-

cinereous-brown; the latter is cinereous at the base of the feathers with the tips brown: the smaller coverts are marked in the same manner as the scapulars; the greater coverts are cinereous-brown, the exposed part of each feather darkest, but not tipped like the others: the eight prime quills are dusky-black, the last with a dash of cinereous; the first is very short, the third by far the longest: secondary quills cinereous-brown above, pale beneath, with three remarkable dusky-black bars across them, nearly in parallel lines, each half an inch in breadth; one only of which is to be seen on the upper side of the wing, the others being hid by the coverts, this is about two inches from the tips of the feathers; on the under part of the wing two of these bars are very conspicuous, the other close to the base is much paler, and hidden by the under coverts, the first row of which is white, with a large dusky bar across their middle; the rest are bright bay, more or less spotted, barred, or margined with white: the under parts of the body, including the under tail coverts and thighs, white, with a broad streak of bright bay down the shaft of each feather: under scapulars with broad alternate bars of bay and white: the tail is somewhat cuneiform, the two middle feathers dark brown, or dusky, the rest dark ash-colour, palest on the two or three outer feathers, which have also their inner webs approaching to white; all except the two middle have four equidistant bars on the inner web, taking in the shaft; these on the two outer feathers are bay, the rest more or less dusky, with a ferruginous tinge on those at the base: legs orange yellow, rather long and slender: claws small black.

In the original description of this species*, taken from a cased specimen, the greater coverts are, by mistake, said to

* Ornithological Dictionary.

have dusky-black on the outer webs towards their middle, forming a small bar; whereas it will be now observed, this visible bar on the wing above is on the secondary quills, and not on the coverts.

The bird from which the above description is taken is a male: it has the feathers behind the ears short, but no ruff continued round the head, as in the Hen Harrier. It was in good condition, and had in its stomach a sky-lark, and yet its weight was not so much as that of the Hen Harrier by three or four ounces; though its length and breadth are much superior, by reason of its long wings and tail. It must also be remarked that it appears to be at least a year old bird, as some of the quills are moulting; the first and second feather of the secondary quills in each wing are not full grown, but are of the same colour as the rest, and possess the same three bars.

I am not enabled to offer any thing further on the synonyma than what has been given in another place; it differs a little, it is true, from the *Falco hyemalis**; but when it is considered how little that species seems to be known, some allowance must be made for want of a more minute description: there seem, however, some marks of such near affinity, that I trust it will hereafter be found the same. Whether this is migratory with us is not at present to be fully determined; the time of the year in which this was shot is rather too early to induce a belief that it is a winter migrant; and the only one besides that which has come under my inspection I think was killed in November, which indicates a winter residence with us. It is, however, more probable that this species may be indigenous to us, and that it has frequently been mistaken for a variety of the Hen Harrier.

* Latham's Synopsis.

SYLVIA DARTFORDIENSIS.

Ind. Orn. ii. p. 517. 31.Dartford Warbler. *Lath. Syn.*

In a paper which I had the honour to lay some time since before the Linnean Society, some notice was taken of the discovery of this little bird in the southern parts of Devonshire: and I there remarked that, as it had been so frequently observed to be a winter inhabitant, a circumstance not favourable to its being a migrative species, (as it was said to breed in Provence on the continent so much further south*) I was not without hopes of ultimately proving it indigenous to this part of England.

My opinion that this species of Warbler bred with us, was greatly strengthened by a letter which I had the pleasure of receiving from a scientific friend in Cornwall, well known in the literary world†, who assured me that his brother had observed these birds for several years to inhabit furze, near Truro; that last year, as well as the present, they were plentiful during the summer season; and that he had not only seen them every month in the year, but had observed young ones soon after they had left the nest, though his search for the nest and eggs had been in vain.

This information redoubled, if possible, my ardour, and I visited a large furze common in my neighbourhood, where I had seen several the preceding autumn; and upon close search on

* Provence is situated between 33 and 34 degrees north latitude, and 5 and 7 east longitude; and therefore, as these birds have been also found in England in latitude 51, and west longitude 5, there can be no doubt but all the intermediate space, taking in nearly the whole of France, is inhabited by them more or less, whenever the situation is congenial to their habits.

† Mr. Stackhouse, of Pendarvis.

the sixteenth of July, three pair of old birds were observed, two of which had young evidently by their extreme clamour, and by frequently appearing with food in their bills. The boldness and excessive garrulity of one pair induced me to believe that the nest was near at hand; but it was not without two hours strict attention to the actions of the parent birds, that I discovered a single young one on the ground; this appeared to be too small to voluntarily leave the nest, which was probably within a few feet, but which, from the almost impenetrable thickness of the surrounding furze, I was not successful in discovering.

On the 17th my researches were renewed, and after three hours watching the motions of another pair, I discovered the nest with three young; it was placed amongst the dead branches of the thickest furze, about two feet from the ground, slightly fastened between the upright or main stems, not in a fork.

On the same day, close to where I found the single young bird, two were observed to be busied, carrying materials for building; and by concealing myself in the bushes, I soon discovered the place of nidification, by the continued returns of the birds with something in their bills, for making their nest; and, upon examination, I found it was just begun. Extraordinary as it may appear, there is great reason to believe that this was the same pair from which I had the day before taken the single young one. Is it not possible that the inclination of the parent birds to propagate again, was the cause of the young leaving the nest prematurely, in defect of a sufficient supply of food, and that the other young perished? A circumstance so singular can no more be denied than positively asserted; but as I could never observe more than one pair near the place, there is reason to believe, though extraordinary, that it was really the case, and that
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they actually began a new nest the day after they were deprived of the only surviving young.

The nest appeared to be finished on the 19th, but it possessed only one egg on the 21st in the afternoon, and on the 26th it contained four, when the nest and eggs were secured.

This nest was placed near the top of the furze, in the thickest part, about four feet from the ground, but so well concealed that, although the birds were repeatedly seen to fly in with building materials in their bills, it was with the greatest difficulty found. The continued flirting of these birds from bush to bush, and through them, is so extremely deceitful, that it is scarcely possible to notice the spot, amongst such an uniformity of cover, where they deliver the contents of their bill, especially as they frequently retire from a very different part.

Like the other, this nest is composed of dry vegetable stalks, particularly goose grass; mixed with the tender dead branches of furze, not sufficiently hardened to become prickly; these are put together in a very loose manner, and intermixed very sparingly with wool. In one of the nests was a single partridge's feather. The lining is as sparing, for it consists only of a few dry stalks of a fine species of carex, without a single leaf of the plant, and only two or three of the panicles.

This thin flimsy structure, which the eye pervades in all parts, much resembles that of the whitethroat. The eggs are also somewhat similar to those of *Sylvia cinerea*, but rather less, weighing only 22 grains; like the eggs of that species, they possess a slight tinge of green; they are fully speckled all over with olivaceous-brown and cinereous, on a greenish-white ground, the markings becoming more dense, forming a zone at the larger end.

Whether the Dartford Warbler usually breeds so late, is not at present to be determined; but as I found two pairs with young at the same time, and have great reason to believe another pair was sitting about the same period, it is reasonable to conclude that they do not propagate very early,—or how are we to account for the loss of the first nests of all these, for there were no young birds to be found flying amongst the furze?

I shall now return to the young birds, which I considered as no small treasure: the first, which was found on the ground, had been three days in my possession before the others were fit to take*, and then being able to fly a little, was put into a nest of chaffinches, and placed in a box; and so much did he like the warmth, that he rested perfectly contented, and though he would for several days after fly up to the top of the box to be fed, yet he retired as soon as satisfied with food, and cuddled amongst his companions.

By experience, grasshoppers, which at this season of the year are to be procured in abundance, are found to be an excellent food for all insectivorous birds; these, therefore, at first were their constant food, and after five or six days a mixture of bread, milk, chopped boiled meat, and a little finely pounded hemp- and rape-seed, made into a thick paste, was sometimes given, to wean them from insect food by degrees; this they became more partial to than even grasshoppers, but they afterwards preferred bread and milk with pounded hemp-seed only, to every other food, the smaller house or window flies excepted.

Before these birds left the nest I put them into a pair of scales, and found the four weighed nine drams, which on an average is

* There is an exact period of age which is the best for rearing young birds by hand, this is when the tips of the quills and the greater coverts of the wings expose a portion of their fibrous ends.

two drams and a quarter each. At this time they collectively ate in one day upwards of five drams of grasshoppers, which is one dram and a quarter each, so that in two days each consumed more than its own weight. Such a repletion is almost incredible, and doubtless greatly beyond what the parent birds could usually supply them with, which by observation appeared to consist of variety, and not unfrequently small phalænæ: their growth, however, was in proportion to this large supply of food.

This interesting little family began to throw out some of their mature feathers on each side of the breast about the middle of August, and the sexes became apparent. At this time they had forsaken their grasshopper food, feeding by choice on the soft victuals before mentioned.

The nestling attachment is very conspicuous in these little birds towards the dusk of the evening, for a long time after they have forsaken the nest; they become restless, and apparently are in search of a roosting place, flying about the cage for half an hour, or until it is too dark to move with safety, when a singular soft note is uttered by one which has chosen a convenient spot for the night, at which instant they all assemble, repeating the same plaintive cry. In this interesting scene, as warmth is the object of all, a considerable bustle is observed, in order to obtain an inward birth, those on the outside perching upon the others, and forcing in between them: during this confusion, which sometimes continues for a few minutes, the cuddling note is continually emitted, and in an instant all is quiet.

Nothing can exceed the activity of these little creatures; they are in perpetual motion the whole day, throwing themselves into various attitudes and gesticulations, erecting the crest and tail at intervals, accompanied by a double or triple cry, which seems to express the words *cha, cha, cha*. They frequently take their food suspended by the wires, with their head down-
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wards, and not unusually turn over backwards on the perch. The males, of which there were three out of the four, began to sing with the appearance of their first mature feathers, and continued in song all the month of October, frequently with scarce any intermission for several hours together: the notes are entirely native, consisting of considerable variety, delivered in a hurried manner, but in a much lower tone than I have heard the old birds in their natural haunts. This song is different from any thing of the kind I ever heard, but in part resembles most that of the stone-chat.

The Dartford Warbler, like the Whitethroat, will sometimes suspend itself on wing over the furze, singing the whole time; but is more frequently observed on an uppermost spray, in vocal strain for half an hour together.

Buffon, who appears to have been the first and perhaps the only person on the continent who knew any thing of the Dartford Warbler as a naturalist, seems to have known very little more than the bird itself, and that it had been found in Provence, (as his name evinces,) but nothing of its habits. If he had not figured it in *Pl. enl.* 655. *f.* 1, it would scarcely be conceived that the history given by that author could be intended for this species. We must therefore conclude that he, like other great men, was deceived in that part of its natural history related by M. Guys of Marseilles, from whom he seems to have collected, that this bird not only feeds amongst cabbages on the smaller lepidopterous insects, but that it roosts amongst their leaves, to secure itself against the *Bat*, its enemy.

To this curious account, implicit faith cannot be given; for as on the continent furze is by no means uncommon, except in the more northern part, there can be no reason to believe the nature of this little creature to be so different in Provence from what it is in England, where it is only found to inhabit the more
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extended tracts covered with that shrub. If indeed it were necessary to hide itself at night from the *Bat*, furze is better calculated for that purpose than cabbages; but I believe there is no species of that genus in Europe sufficiently large to attack even our most diminutive bird, the golden-crested wren, which we may safely conclude has no occasion to hide itself from any European species of *Vespertilio*.

Science, unfortunately, is too frequently blended with fiction, occasioned by too large a share of credulity; the detection of such errors is a work of time, and a series of years are often required to correct what, according to the general merit of an author, has more or less been stamped with credit.

Experience from ocular demonstration has at last been able to collect materials concerning the natural history of *Sylvia Provincialis*, which serves to evince that M. de Buffon was misled, and that, in fact, little was known of the habits of this elegant little Warbler till the present discoveries.

BIRDS NEWLY DISCOVERED IN GREAT BRITAIN.

In this place I shall take the opportunity of recording some birds which, as far as I have been able to discover, have not till recently been found in this kingdom, but now claim a place in the British Fauna.

ARDEA ÆQUINOCTIALIS.

Ind. Orn. ii. p. 696. 70.

Little White Heron. *Latham. Syn.* v. p. 93. No. 63.

This bird was killed in Devonshire the latter end of October, in the year 1805, and is now in my museum. Upon dissection it proved a female.

TANTALUS.

TANTALUS VIRIDIS.

Ind. Orn. ii. p. 707. 15.Green Ibis. *Lath. Syn.* v. p. 114. 13.

This species was shot in the interior part of Devonshire about the middle of September, in the same year as the preceding: it is a male, and occupies a place with the last.

Whether this, the Bay, and the Glossy Ibis are specifically distinct, admits of doubt, and requires further investigation.

SCOLOPAX NOVEBORACENSIS.

Ind. Orn. ii. p. 723. 32.Red-breasted Snipe. *Lath. Syn.* v. p. 153. 26.

A small flock of these extremely rare birds made their appearance on the coast of Devon in the spring of the year 1803, one of which was shot in my neighbourhood, and is now in my museum. Soon after, I received information that a similar bird had been shot at Weymouth, in company with several others; and the skin of another was sent to me, which had been killed at Sandwich in Kent; probably belonging to the same flock, as the account of the number seen last on the east coast tallied nearly with what first was noticed in the west, allowing for those which are stated to have been shot.

GLAREOLA AUSTRIACA.

Ind. Orn. ii. p. 753. 1.Austrian Pratincole. *Lath. Syn.* v. p. 222. t. 85.

A bird of this species has been shot, at or near Liverpool
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in Lancashire, and is now in the museum of Lord Stanley. Having been informed that a publication will soon make its appearance wherein not only the particulars relative to the capture of this bird will appear, but also a very excellent figure, I shall forbear to anticipate the author's intention.